Mr. H. Bzura
Old Bridge Chemicals<sub>1</sub> Inc.
Old Waterworks Road
P.O. Box 194
Old Bridge, NJ O8857

Dear Mr. Bzura:

This is in response to your letters or October 15 and 16, 1986, regarding the regulatory status of the etchants 1/that are used by Old Bridge to manufacture various copper salts. Since I wrote you in August 1983, the regulations defining which materials are solid and hazardous waste when they are recycled have been amended. See 50 FR 614, January 4, 1985. As we've discussed previously, the amended definition adopts the approach that for materials being recycled, one must know both what the material is and how it is being recycled before determining whether or not it is a Subtitle C waste. Thus, under the regulations, any material that is used in a manner constituting disposal (or used to produce a product that is placed on the land); used as a fuel (or used to produce a fuel); or speculatively accumulated, 2/ is defined as a solid waste, and if hazardous, a hazardous waste; in addition, certain materials when reclaimed would also be defined as solid and hazardous wastes. At the same time, materials that are used/reused (either as an ingredient or feedstock in a manufacturing operation where reclamation does not occur, or as a substitute for commercial products) are not defined as solid wastes.

In applying the definition to your situation, I agree with you that when etchants are used/reused as raw materials in the manufacture of various copper salts (and where reclamation does not occur), these materials would not be defined as solid wastes, and therefore, not be subject to the hazardous waste rules.

- 1/ The etchants include copper chloride and copper ammonium chloride.
- Speculative accumulation means accumulating wastes that are potentially recyclable, but for which no recycling market (or no feasible recycling market) exists, or accumulating wastes before recycling, unless 75% of the accumulated material is recycled during a one-year period.
  - 3/ Commercial chemical products are not solid wastes if speculatively accumulated.

In reviewing your May 31, 1983 letter, the use of etchants to produce basic copper sulfate (the first process described in your letter) would not constitute solid waste management; that is, these materials are not subject to the Subtitle C rules. However, the process to produce a copper sulfate solution (the second process described in your letter) would constitute reclamation, and therefore, if the etchant is hazardous (i.e., is listed in Subpart D of Part 261 or exhibits one or more of the hazardous waste characteristics identified in Subpart C of Part 261), the transportation and storage of these etchants would be subject to the hazardous waste rules. 3/ With respect to the use of the other "copper by-products" and their regulatory status, I would need to have more information before making a determination.

Please feel free to give me a call if you have any further questions; my telephone number is (202) 475-8551.

Sincerely,

Matthew A. Straus Chief Waste Characterization Branch

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Mr. Matthew Straus U.S. Environmental Protection Agency 501 - M Street, S.W. (WH-565B) Washington, D.C. 20460

Dear Sir:

We understand that there have been many changes in the EPA Regulations since I last wrote you.

Have any of the new regulations been promulgated that would effect Old Bridge Chemicals, Inc.?

Old Bridge Chemicals purchases the etchants which are a by-product in the manufacture of circuit boards. These etchants are as follows:

- 1. Copper chloride with a slight amount of excess acid; and
- 2. Copper ammonium chloride pH9.

The above are used as a raw material in the manufacture of various copper salts without first recovering the cooper as metal from the solution.

The process has not changed from the letter I sent you on May 31, 1983, and which you answered by your letter of August 17, 1983, copies of which are enclosed.

Various states have requested a more recent letter than the enclosed copies.

Thank you for your cooperation in the above matter.

If there are any questions, please do not hesitate to call.

A prompt reply would be appreciated.

Very truly yours,

OLD BRIDGE CHEMICALS, INC.

H. Bzura Consultant

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

Mr. H. Bzura Old Bridge Chemicals, Inc. Old Waterworks Road P.O. Box 194 Old Bridge, NJ 08857

Dear Mr. Bzura:

In our telephone conversation on August 16, you requested an interpretation regarding the regulatory status of your copper sulfate recycling processes under the existing hazardous waste regulations (See 45 FR 33119, May 19, 1980). .1/2/ Under these regulations, persons engaging in recycling operations are subject to regulations if they are handling a hazardous sludge or material listed as hazardous in 40 CFR 261.31 or 261.32 whereas materials that are hazardous wastes only by virtue of exhibiting a characteristic (other than sludges) are exempt from regulation (see 40 CFR Part 261.6). Since the spent copper chloride and copper ammonium chloride solutions are hazardous solely because they exhibit the characteristic of corrosivity, they are currently exempt from regulation.

Please give me a call if I can be of any further assistance. My telephone number is (202) 382-4770.

Sincerely yours,

Matthew A. Straus Manager Hazardous Waste Definition Program

This interpretation is based on the information provided in your letters dated May 31 and July 1, 1983, and in our meeting on June 30, 1983. All this information is in the public docket for the proposed definition of solid waste.

<u>2</u>/ Letters were previously sent to you dated June 16 and August 10, 1983, regarding the regulatory status of your operation under the proposed amendments to the definition of solid waste.

Mr. Matthew Straus
U.S. Environmental Protection Agency
401 - M Street, S.W. (WH-565B)
Washington, D.C. 20460

Dear Sir:

Confirming our telephone conversation of today, Old Bridge Chemicals is interested in utilizing cooper ammonia chloride and copper chloride solutions from manufacturers of circuit boards for the production of various copper compounds.

Enclosed, you will find two EPA registrations, one for copper sulfate solution and the other for basic copper sulfate. We are presently producing the above.

We manufacture these products in either of two ways: First, by boiling the solutions with sodium hydroxide resulting in copper oxide formation. The copper oxide is filtered, washed, and subsequently reacted with sulfuric acid to form copper sulfate. The copper sulfate is then treated with soda ash to form the basic copper sulfate. The second method is the utilization of liquidation exchange: The copper is extracted and converted to copper sulfate solution.

We are using the copper ammonia chloride and the copper chloride solutions as raw materials. Both are not registered under current regulations; therefore, they should not require a manifest. I would appreciate a letter from you indicating that such is the case.

Thank you for your cooperation and awaiting your confirmation.

Very truly yours,

OLD BRIDGE CHEMICALS, INC.

H. Bzura Consultant

HB:peg Enclosures Mr. Matthew Straus U.S. Environmental Protection Agency 501 - M Street, S.W. (WH-565B) Washington, D.C. 20460

Dear Sir:

I sent you a letter dated October 15, 1986, regarding purchase of copper by-products.

In addition to the copper chloride and copper ammonium chloride, we have been offered for sale various other copper by-products which can be used in the manufacture of other copper chemicals.

I would like to purchase these other copper by-products, if they are not considered hazardous waste. Since we are utilizing them in a commercial viable process as a raw material, would they be covered by your definition of a raw material and not as a hazardous waste?

May I have your answer to the above.

Thank you.

Very truly yours,

OLD BRIDGE CHEMICALS, INC.

H. Bzura Consultant

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